/5.2240

AUTHORS: Koval'skiy, A. Ye., Vrzheshch,Ye. Ya.

TITLE: The effect of the temperature of manufacturing single-phase tantalum tungsten carbide on the incubation period of decomposition

TEXT: The methods of X-ray and metallographical analysis were used to investigate the effect of temperature of preparing a single-phase solid solution of TaC-WC on the duration of the incubation period and the dispersity of phases after decomposition. The specimens were prepared by two stages: a) roasting at 1,800°C of a WC and Ta_2O_5 mixture with carbon black; b) repeated pressing and sintering of the carbide powders obtained at temperatures required to attain complete solubility, and above. It is shown that an increase of the preheating temperature prior to annealing extends considerably the incubation period. For instance, a specimen roasted at 1,850°C (1.5 hours) decomposed after 1 hour annealing at 1,400°C, but a specimen roasted at 2,350°C did not decompose after 48 hour annealing at 1,600°C. The dispersity of carbide phases is the higher

Card 1/2

The effect of the temperature ...

S/137/62/000/002/039/144
A006/A101

the greater the oversaturation of the solid solution. Decomposition of the composite TaC-WC carbide up to equilibrium concentrate occurs in a jump after the incubation period. This is confirmed by the absence of partially decomposed crystals. In individual cases some crystals were observed, where the decomposition had not as yet started, together with cases of complete decomposition.

I. Brokhin

[Abstracter's note: Complete translation]

Card 2/2

S/736/60/000/002/005/0??

AUTHORS: Koval'skiy, A. Ye., Vrzheshch, Ye. Ya.

TITLE: Effect of the temperature of preparation of single-phase TaW carbide on the incubation period of decomposition.

SOURCE: Vsesoyuznyy nauchno-issledovatel'skiy institut tverdykh splavov. Sbornik trudov. no.2. Moscow, 1960. Tverdyye splavy. pp. 129-134.

TEXT.   The paper reports an investigation of the effect of the temperature of preparation of a single-phase solution of WC in TaC on the duration of the incubation period and of the dispersion of the phases after decomposition. It supplements the work of I. I. Kitaygorodskiy and N. M. Pavlushkin (Steklo i keramika, no. 11, 1955) on the solubility of WC in TaC which showed that the decomposition occurs with a jump after an incubation period and is accompanied by a breaking down of the grains of the solid solution. Specimens were made of a mixture of Ta and W oxides (in varying proportions) and lamp black which, in a first stage, were calcined at 1800°C. Second-stage pressing and sintering at temperatures at and significantly above the solid-solution equilibrium temperature produced specimens suitable for X-ray and microscopic inspection; the specimens were not ground or polished in order to avoid decomposition due to deformation. Details of the preparation and heat-treatment process are tabulated; they show that an increase in the sintering temperature of the single-phase solution prior to roasting lengthens the incubation period.

Card 1/2

Effect of the temperature of preparation...

Example: A specimen sintered at 1850°C for 1.5 hrs will decompose at 1400°, whereas a specimen sintered at 2150° for 1.5 hrs will not decompose even after 48 hrs at 1600°. A comparison of the sintering temperatures of the specimens with the curve of their solubility versus temperature suggests that the rate of decomposition decreases with increasing excess of the sintering temperature over the equilibrium temperature. Likewise, the degree of fineness of the solid-solution crystals and the dispersion of the precipitating phase increases with an enlargement of the supersaturation. In some instances of weak roasting (1400°, 15 min) microstructural nonuniformities among various grains and indications of the presence of intragranular boundaries in some grains are observed, including grains of pure TiC //Abstracter's note: Should probably read "TaC"// in which the phenomenon appears to be the manifestation of a sub-microstructural diversity and not the result of any decomposition. However, 2-4 hour extended roasting resulted in the appearance of two carbide phases, namely, the predecomposition phase with a lattice period a=4.35 Å and the 1400° equilibrium phase with a=4.42 Å. Thus, the nonuniform grain structure reflects different stages of decomposition. X-ray lines corresponding to two carbide phases with different lattice periods were not blurred in a single instance. There are 6 figures, 1 (unnumbered) table, and 4 references (3 Russian-language Soviet and 1 German).

ASSOCIATION: None given.

Card 2/2

ACCESSION NR: AP4023414   S/0048/64/028/003/0601/0606

AUTHOR: Vrzhetsieno, A.

TITLE: Magnetocrystal anisotropy of the intermetallic compound Mn_5Ge_3 /Report, Symposium on Ferromagnetism and Ferroelectricity held in Leningrad 30 May-5 June 1963/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v.28, no.3, 1964, 601-606

TOPIC TAGS: magnetic anisotropy, manganese magnetic moment, paramagnetic anisotropy, persistence, manganese germanium compound

ABSTRACT: The magnetic anisotropy of Mn_5Ge_3 (hexagonal type $D8_8$ structure) was measured. A 5 mm diameter spherical "pseudo-single crystal" was employed, i.e., a polycrystalline material consisting of large crystals with nearly parallel hexagonal axes. Magnetization curves were obtained in the directions of greatest and least susceptibility by a ballistic method at temperatures from 90 to $360^{\circ}K$ and magnetizing fields up to 11 350 Oe. The curves of magnetization versus temperature at a fixed magnetizing field taken in the direction of minimum susceptibility for fields less than 9000 Oe showed a slight rise of magnetization with temperature to a maximum near the Curie point. This rise is ascribed to the fact that magnetization in

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ACCESSION NR: AP4023414

this direction is effected by rotation against the anisotropy forces, and the anisotropy decreases with increasing temperature. The magnotocrystal anisotropy energy was calculated from the area between the magnetization curves taken in the directions of maximum and minimum susceptibility. This decreased monotonically from a value (extrapolated) of 3.74 x 10^6 erg/cm^3 at 0°K to zero at 313°K. The Curie point is 300°K; the anisotropy thus persists into the paramagnetic region. The saturation magnetization extrapolated to 0°K was 140 emu/g. From this a value of 2.47 Bohr magneton was calculated for the mean magnetic moment of Mn. This is in agreement with measurements of K.Kanematsu (J.Phys.Soc.Japan 17,85,1962). "The author expresses his gratitude to S.S.Szczeniowski for his valuable discussions and for reading the manuscript." Orig.art.has: 2 formulas, 8 figures and 1 table.

ASSOCIATION: Fizicheskiy institut Pol'skoy Akademii nauk (Physics Institute, Polish Academy of Sciences)

SUBMITTED: 00   DATE ACQ: 10Apr64   ENCL: 00

SUB CODE: PH   NR REF SOV: 002.   OTHER: 013

Card 2/2

where a_o and C are constants.

The curve of the temperature function of magnetocrystal anistropy (A. Vrzhetsiono, Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya, Vol 28, 1964, page 601), experimentally determined, verifies the correctness of the above formulas.

Card 1/2

L 37677-65
ACCESSION NR: AP5010717

ASSOCIATION: Fizicheskiy institut Pol'skov AN. Poznan (Institut of Physics,

FOREIGN AN)

SUBMITTED: 23Jun64	ENCL: 00	SUB CODE: TD, IC
NR REF SOV: 002	OTHER: 000	JPRS

Card 2/2 RO

SKALICHKOVA, O.; VRZHEZINKOVA, V.; KRZHEMENOVA, I.; REYZENAUER, R.

Psyche and psychopathological signs in endemic degeneration. Zhur.
nevr.i psikh. 62 no.7:1053-1057 '62.   (MIRA 15:9)

1. Psikhiatricheskaya klinika (zav. - prof. V.Vondrachek) Nauchno-
issledovatel'skogo endokrinologicheskogo instituta (dir. - dotsent
K.Shilink), Praga.
(CZECHOSLOVAKIA--CRETINISM)

S/137/62/000/002/074/14
A006/A101

AUTHOR: Vrzhashch, E. I.

TITLE: Investigating the effect of tempering temperature on the properties of a cyanided layer in "20" grade steel

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 2, 1962, 34 - 35, abstract 21207 ("Izv. Irkutskogo s.-kh. in-ta", 1960, no. 16, 105 - 113)

TEXT: The author investigated the effect of N on tempering resistance of a cyanided grade "20" steel layer, containing in %: C 0.25; Si 0.35; Mn 0.49; P 0.025; S 0.047. The nature of changes which occur in a quench-hardened cyanided layer, subjected to tempering at 100 - 500°C, is similar to changes observed in quenched high-carbon steels tempered at these temperatures. N raises the resistance of a cyanided layer against tempering. There are 14 references.

T. Rumyantseva

[Abstracter's note: Complete translation]

Card 1/1
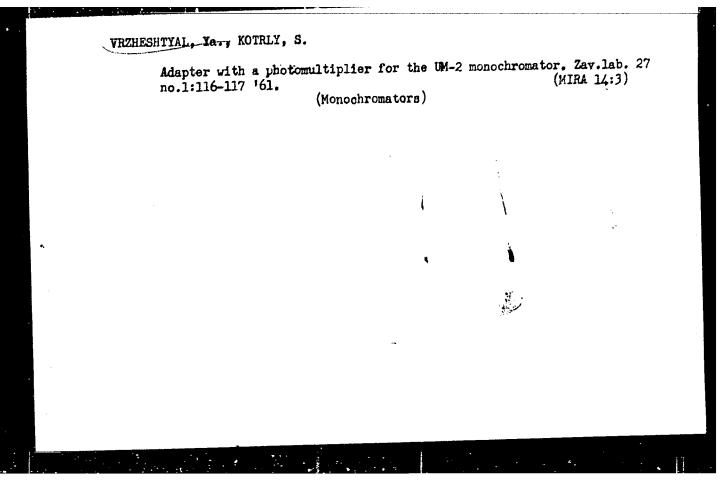
KOVAL'SKIY, A.Ye.; VRZHESHCH, Ye.Ya.

Effect of the temperature of preparing a one-phase tantalum-tungsten carbide on the incubation period of decomposition.
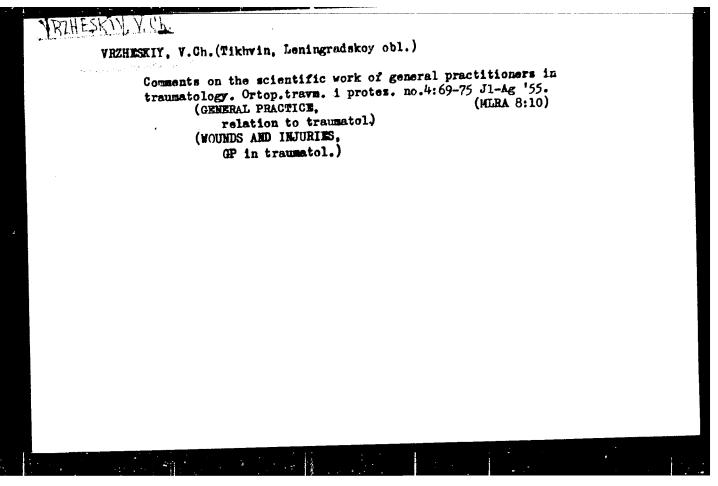Sbor. trud. VNIITS no.2:129-134 '60. (MIRA 15:2)
(Tantalum carbide)
(Heat of formation)

L 40056-66   EWT(m)/EWP(t)/ETI   IJP(c)   WH/JW/JD

ACC NR: AP6025942   SOURCE CODE: UR/0226/66/000/007/0076/0083

AUTHOR: Chaporova, I. N.; Rybal'chenko, R. V.; Vrzheshch, Ye, Ya.

ORG: All-Union Scientific Research Institute of Hard Alloys (Vsesoyuznyy nauchno-issledovatel'skiy institut tverdykh splavov)

TITLE: Synthesis and properties of (Ti, W, Cr)C carbides

SOURCE: Poroshkovaya metallurgiya, no. 7, 1966, 76-83

TOPIC TAGS: sintered carbide, titanium carbide, tungsten carbide, chromium carbide, carbide structure, carbide property

ABSTRACT: The effect of adding up to 25% Cr_3C_2 on the properties of (Ti, W)C carbide with a constant TiC:WC ratio of 35:65, was investigated. The initial (Ti, W, Cr)C carbides were synthesized from TiO_2 + WC + Cr_2O_3 + C powders in hydrogen at temperatures from 2573 K for pure TiO_2 + WC to 1923 K for carbide with 25% Cr_3C_2. The carbide powders were compacted and sintered in vacuum at 2073—2123 K. The porosity of sintered compacts did not exceed 0.2%. An x-ray diffraction analysis revealed that all the alloys have a solid-solution structure with an fcc lattice. With increasing Cr_3C_2 content oxidation resistance sharply increased. The respective weight loss of (TiW)C carbide and carbide containing 20% Cr_3C_2 was 72 and 3.6% of the original weight in 10 hr at 1270 K. At 20% Cr_3C_2 the resistivity increased by 60%, Young's modulus dropped from 37 to 33 $n/m^2 \cdot 10^{10}$. With increasing temperature from

Card 1/2

L 40056-66

ACC NR: AP6025942   /

290 to 1070 K hardness decreased from about 2500 to 750—800 $n/m^2 \cdot 10^7$ regardless of composition. The coefficient of thermal expansion, bend strength, and contact angle in wetting with Co in vacuum showed little or no change. Orig. art. has: 7 figures and 3 tables. [WW]

SUB CODE: 11/   SUBM DATE: 28Oct65/   ORIG REF: 003/   OTH REF: 002/   ATD PRESS:
                                                                                          5053

Card 2/2

VRZHESHTYAL, Ya., KOTRLY, S.

Adapter with a photomultiplier for the UM-2 monochromator. Zav.lab. 27
no.1:116-117 '61.   (MIRA 14:3)
(Monochromators)

VRZHESKIY, V.Ch.

VRZHESKIY, V.Ch.(Tikhvin, Leningradskoy obl.)

Comments on the scientific work of general practitioners in traumatology. Ortop.travm. i protez. no.4:69-75 Jl-Ag '55.

(GENERAL PRACTICE,
    relation to traumatol.)
(WOUNDS AND INJURIES,
    GP in traumatol.)

(MLRA 8:10)

ACCESSION NR: AP5010996   JR/0286/65/000/007/0085/0085

AUTHORS: Antropov, L. I.; Vranozak, L. G.; Pogrebova, I. S.; Drumova, O. I.;
Sakiyanaya, I. V.; Goldasov, Yu. T.

TITLE: A method for protecting metals from corrosion by acids. Class
No. 15

SOURCE:

TOPIC TAGS: corrosion prevention, acid etching, inhibitor, corrosion
inhibitor, iron

ACCESSION NR: AP5010896

SUBJECT

ENCL:

SUB CODE:

Card 2/2

VRZHOSEK, G. G. [Vrosek, G. G.]; KUDRA, O. K.

Overvoltage of hydrogen evolution on mercury in a ripple current.
Ukr. khim. zhur. 28 no.5:604-610 '62.   (MIRA 15:10)

1. Kiyevskiy politekhnicheskiy institut.

    (Hydrogen)   (Overvoltage)   (Electrodes, Mercury)

VRZHOSEK, G.G.; KUDRA, O.K.

Effect of temperature on polarization in the presence of pulsating current. Ukr. khim. zhur. 26 no.5:562-564 '60.   (MIRA 13:11)

1. Kiyevskiy ordena Lenina politekhnicheskiy institut.
(Polarization (Electricity))

VRZHOSEK, G.G.

KUDRA, O.K., prof., doktor khim. nauk; VRZHOSEK, G.G., aspirant

Part 1: Influence of the intermittent current on the decomposition
potential of hydrochloric acid. Izv. KPI 20:52-65 '57. (MIRA 11:3)
(Hydrochloric acid) (Electrochemical analysis)

VRZHOSEK, G.G.

KUDRA, O.K., prof., doktor khim. nauk; VRZHOSEK, G.G., aspirant

Part 2: Influence of ripple current on some anode processes.
Izv. KPI 20:66-75 '57.   (MIRA 11:3)
                (Hydrochloric acid) (Polarography)

VRZHOSEK, G.G

KUDRA, O.K., prof., doktor khim. nauk; VRZHOSEK, G.G., aspirant

Part 3: Influence of the anion nature on the drop in decomposition
potential while using ripple current. Izv. KPI 20:76-89 '57.
         (Acids, Organic) (Polarography)   (MIRA 11:3)

VRZHOSEK, G. G.

VRZHOSEK, G. G.: "Investigation of electrode processes with a pulsating current". Kiev, 1955. Min Higher Education Ukrainian SSR. Kiev Order of Lenin Polytechnic Inst, Chair of Physical and Colloid Chemistry. (Dissertation for the degree of Candidate of Chemical Sciences)

SO: Knizhnaya Letopis' No. 51, 10 December 1955

VRZHOSEK, G.G.; KUDRA, O.K.

Effect of some admixtures on polarization by a ripple current. Izv.
vys.ucheb.zav.; khim.i khim.tekh. 3 no.6:1008-1010 '60.
(MIRA 14:4)

1. Kiyevskiy politekhnicheskiy institut, kafedra fizicheskoy i killoidnoy
khimii.
(Polarization (Electricity)) (Electrolysis)

BARMASHENKO, I.B., kand.tekhn.nauk; IGNATENKO, O.Kh. [Ihnatenko, O.Kh.], kand.
tekhn.nauk; VRZHOSEK, G.G. [Vrzhosek, H.H.], kand.tekhn.nauk;
LAZEBNIK, V.V.

Oxidation of aluminum spray coating on porcelain and its imitation
gold finishing. Leh.prom. no.3:34-40 Je - Ag '62.   (MIRA 16:2)

1. Kiyevskiy politekhnicheskiy institut (for Barmashenko, Ignatenko,
Vrzhosek). 2. Ukrainskiy nauchno-issledovatel'skiy institut stekol'noy
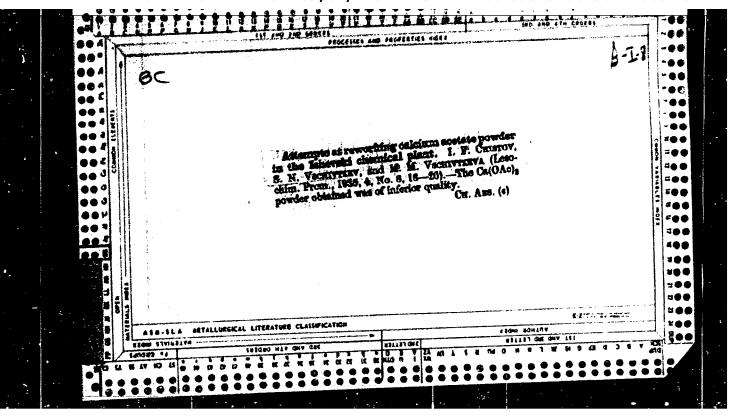i farforo-fayansovoy promyshlennosti (for Lazebnik).
(Aluminum)   (Oxidation)   (China painting)
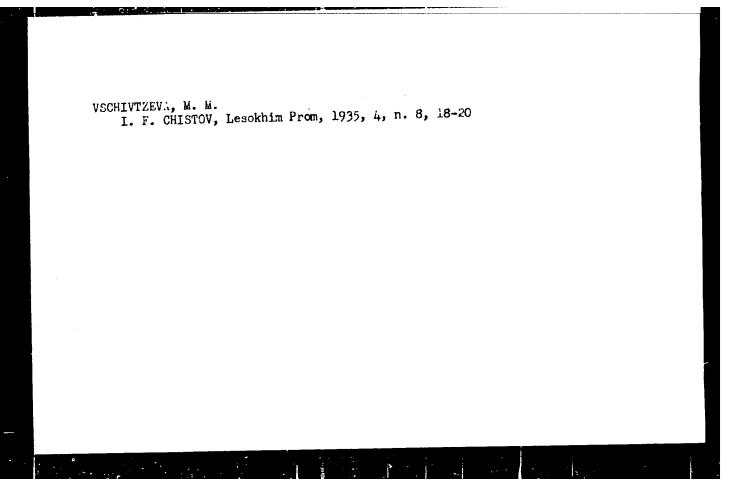
DOROFEYEVA, N.G.; VRZHOSEK, N.I.; KUDRA, O.K.

Electrochemical properties of hydrogen bromide solutions in isoamyl alcohol. Ukr. khim. zhur. 29 no.2:156-161 '63.
(MIRA 16:6)

1. Kiyevskiy politekhnicheskiy institut.
(Hydrobromic acid)   (Isopentyl alcohol)
(Electrochemistry)

BC

Attempted at reworking calcium acetate powder in the Isotavid chemical plant. I. F. Christov, S. N. Vasutyrev, and M. M. Vasutyrreva (Leso-chim. Prom., 1935, 4, No. 8, 16—20).—The $Ca(OAc)_2$ powder obtained was of inferior quality. Cн. Авs. (e)

METALLURGICAL LITERATURE CLASSIFICATION

ACHIEVIEV, S. R.
    S. R. KALAGIN, Lesokhim Prom, 1934, 3, n. 9-10, 35-41;
    n. 11, 22-27

VSCHIVTZEVA, M. M.
    I. F. CHISTOV, Lesokhim Prom, 1935, 4, n. 8, 18-20

30629
3/058/61/000/008/040/044
A058/A101

9,9100

AUTHORS: Vsekhsvyatskaya, I. S., Tsedilina, Ye. Ye.

TITLE: The correlation function of the amplitude of signals scattered from
           an absolutely rough screen

PERIODICAL: Referativnyy zhurnal, Fizika, no. 8, 1961, 331, abstract 8Zh419
           ("Tr. In-ta zemn. magn., ionosfery i rasprostr. radiovoln. AS USSR",
           no. 17(27), 1960, 287-291)

TEXT: The correlation function of the amplitude of signals reflected from
the ionosphere is calculated taking into account random as well as oriented
motions in the ionosphere. It is shown that for an absolutely rough ionosphere
the correlation function is the product of the autocorrelative functions that
are obtained in the two limiting cases: when only drift or purely random motion
of scattering centers is occurring.

[Abstracter's note: Complete translation]

Card 1/1

VSEKHSVYATSKAYA, I.S.

Calculation of the correlation coefficient in the presence of a
regularly reflected wave and a spectrum of a chaotic waves. Geomag.i
aer. 1 no.2:213-222 Mr-Ap '61.   (MIRA 14:7)

1. Institut zemnogo magnetizma, ionosfery i rasprostraneniya
radiovoln AN SSSR.
              (Ionospheric radio wave propagation)

VSEKHSVYATSKAYA, I.S.

Use of characteristic functions in the processing of drift
recordings. Geomag. i aer. 3 no.4:775-777 Jl-Ag '63.
(MIRA 16:11)

1. Institut zemnogo magnetizma, ionosfery i rasprostraneniya
radiovoln AN SSSR.

BAYRACHENKO, I.V.; VSEKHSVYATSKAYA, I.S.; MIZERNYUK, A.T.; SHKURDODA, V.F.

Some results of radar observations of meteor activity. Mezhdunar. geofiz. god [Kiev] no.2:75-78 '60. (MIRA 14:1)

1. Kiyev State University.
         (Meteors)   (Radar in astronomy)

S/203/62/002/004/010/018
I046/I246

6.9200

AUTHOR: Vsekhsvyatskaya, I.S.

TITLE: The statistical properties of the envelope of a signal and the Poisson noise

PERIODICAL: Geomagnetizm i aeronomiya, v. 2, no.4, 1962, 712-719

TEXT: The phenomenological model of the Poisson noise, a super-position of independent random elementary pulses, is used in cal-culating (a) the frequency function for the envelope of the noise and of a sinusoidal signal; (b) the first and second order moments for cases with and without sinusoidal signals; and (c) the general correlation characteristics of any order. All these quantities de-pend on the parameter ν/α that characterizes the number of pulses per 1 cps of the transmission band. The characteristic properties of the Poisson noise are observed only for finite ν/α values, whereas when $\nu/\alpha \rightarrow \infty$ all the properties pass naturally into the analogous expressions for the Gaussian noise. There is 1 figure.

Card 1/2

S/203/62/002/004/010/018
I046/I246

The statistical properties of...

ASSOCIATION: Institut zemnogo magnetizma, ionosfery i rasprostra-
               neniya radiovoln AN SSSR (Institute of Terrestrial
               Magnetism, the Ionosphere, and Propagation of Radio
               Waves, AS USSR)

SUBMITTED: April 19, 1962

Card 2/2

VSEKHSVYATSKAYA, I.S.

Calculation of the phase correlation coefficient of random
processes. Geomag.i aer. 2 no.1:86-90 Ja-F '62.   (MIRA 15:11)

1. Institut zemnogo magnetizma, ionosfery i rasprostraneniya
radiovoln AN SSSR.
        (Ionospheric research)   (Electromagnetic waves)

VSEKHSVYATSKAYA, I.S.

Statistical properties of the sinusoidal signal and Poisson
noises emvelopes. Geomag. i aer. 2 no.4:712-719 Jl-Ag '62. (MIRA 15:10)

1. Institut zemnogo magnetizma, ionosfery i rasprostraneniya
radiovoln AN SSSR.
                              (Noise)

Il. 6180

AUTHOR: Vsekhsvyatskaya,I.S.

TITLE: Calculation of phase correlation coefficient in
               random processes

PERIODICAL: Geomagnetizm i Aeronomiya, v.2, no.1, 1962, 86-90

TEXT: On the basis of the four-dimensional probability density
an integral expression is obtained for the phase correlation
function of random processes in the presence of a specular
reflected wave and a spectrum of chaotic waves. The four-fold
integral obtained can be reduced to a one-fold integral. For the
two special cases: $E_c^2/2\sigma^2 \to \infty$ and $E_c^2/2\sigma^2 \to 0,$ simple expressions

for $\overline{\cos\alpha\cos\beta}$ and $\rho_{\cos\alpha}(\tau) = \dfrac{\overline{\omega_3^2 x \cos\beta - \cos\alpha^2}}{\overline{\cos^2\alpha} - \overline{\cos\alpha^2}}$ are found. A

method which makes possible the calculation of every even
correlation and cross-correlation characteristic of the envelope

Card 1/2

S/203/62/002/001/009/019
I023/I223

Calculation of phase correlation...

amplitude and phase of a random process, is described.

ASSOCIATION: Institut zemnogo magnetizma, ionosfery i
              rasprostraneniya radiovoln Akademii nauk SSSR
              (Institute of Terrestrial Magnetizm, Ionosphere
              and Radiowave Propagation, Academy of Sciences
              USSR)

SUBMITTED: December 5, 1961

Card 2/2

VSEKHSVYATSKAYA, Ye.I.; VSEKHSVYATSKIY, S.K.

Bright fireball above Kiev. Astron.tsir. no.226:13 0 '61.
(MIRA 16:1)

1. Kafedra astronomii Kiyevskogo universiteta.
(Meteors)

BAYBACHENKO, I.V.;MIZERNYUK, A.T.;VSEKHSVYATSKAYA, Yu.S.;SHKURDODA, V.F.

Radar observations of meteoric activity in January-March 1958.
Biul. Kom. po komet i meteor. AN SSSR no.3:15-18 '58   (MIRA 13:3)

1. Kiyevskiy gosudarstvennyy institut.
      (Meteors)

VSEKHSVYATSKY, V.

Astronomical Observatory, Odessa, U.S.S.R.

Commission pour l'Etude Physique des Cometes.

SO: Transactions of International Astronomical Union, 1950, Unclassified

VSEKHSVYATSKIY, S. [Vsekhsviats'kyi, S.], doktor fiz.-mat.nauk, prof.

In the Arctic regions. Nauka i zhyttia 9 no.10:51-54
O '59.   (MIRA 13:2)
                        (Arctic regions)

VSEKHSVYATSKIY, S. [Vsekhsviats'kyi, S.], doktor fiz.-matem.nauk, prof.

Stars draw closer. Nauka i zhyttia 12 no.4:25-26 Ap '62.
(MIRA 15:8)

(Astronomy)

VSEKHSVYATSKIY, S.K.

Possibility of the existence of a ring of comets and meteorites
around Jupiter. Astron.zhur. 39 no.2:290-302 Mr-Ap '62.
(MIRA 15:3)
1. Kafedra astronomii Kiyevskogo gosudarstvennogo universiteta.
(Jupiter (Planet)) (Comets) (Meteorites)

BERENSHTEYN, F.Ya.; KOPELOVICH, A.G.; VRUBLEVSKIY, S.V.

Effect of nicotinic acid on the hyperglycemic activity of some
trace elements. Dokl.AN BSSR 3 no.2:74-76 F '59.

(MIRA 12:5)

1. Predstavleno akademikom AN BSSR V.A.Leonovym.
            (NICOTINIC ACID--PHYSIOLOGICAL EFFECT)
            (TRACE ELEMENTS--PHYSIOLOGICAL EFFECT)
                  (HYPERGLYCEMIA)

VSEKHSVYATSKIY, S. K.

"A century of the main astronomical observatory USSR," Astron. Zhur., 16, No. 6, 1939.

Report U-1518, 23 Oct 1951

VSEKHSVYATSKIY, S. K.

Kiev Astronomical Observatory (-1945-)

"On 'local' and 'world' magnetic perturbations,"

Iz. Ak. Nauk SSSR, Geograf. i Geofiz., No. 5-6, 1945

VSEKHSVYATSKIY, S.K.

Addendum to the catalog of absolute magnitudes of comets. Part III.
Comets 1880-1900; some characteristics of the distribution of
absolute magnitudes of comets. Publ.Kiev.astron.obser.no.2:3-21
'48.
                                            (MLRA 7:2)
                                            (Comets)

VSEKHSVYATSKIY, S.K.

Observations of Nova Aquilae 1945. Publ.Kiev.astron.obser.no.2:
91-93 '48.   (MLRA 7:2)
                                        (Stars, New)

VSEKHSVYATSFIY, S. K.

Vsekhsvyatskiy, S. K. - "Investigation of the general trilliance and positions of comets at the Kiev astronomical observatory", Publikatsii Kiyevsk. astron. observatorii (Kiyevsk. gos. un-t im. Shevchenko), No. 2, 1948, p. 95-99.

SO: U- 3042, 11 March 53, (Letopis 'Zhurnal 'nykh Statey, No. 8, 1949).

VSEKHSVYATSKIY, S.K.

Kiev Observatory expedition for observation of the solar eclipse
of July 9, 1945. Publ.Kiev.astron.obser.no.2:101-104 '48.
(MLRA 7:2)

(Astronomy—Observations) (Eclipses, Solar—1945)

VSEKHSVYATSKIY, S. K.

Mbr., Kiev Astronomical Observatory, -c1948-.

"Brightness of 1880-1900 Comets and Certain Peculiarities in the Distribution of the Comets' Absolute Magnitudes," Astron. Zhur., 25, No. 6, 1948.

BR-52085091

ACCESSION NR: AP4032146

8/0254/64/000/004/0049/0052

AUTHOR: ∧(Candidate of physico-mathematical sciences, Professor Vsekhsvyats'ky*y, S.

TITLE: What has been learned about the sun and the solar system

SOURCE: Nauka i zhy*ttya, no. 4, 1964, 49-52

TOPIC TAGS: solar system, planet, space flight

ABSTRACT: This non-technical article describes the development of knowledge of the solar system during the past 400 years and the resulting changes in ideas about its origin. A table of distances and periods of rotation and revolution is given, and it is shown how the relative positions and speeds of the planets are taken into consideration in planning flights of space vessels. Orig. art. has: 2 figures and 1 table.

ASSOCIATION: none

Card 1/2

BEYTRISHVILI, I.R.; VSEKHSVYATSKIY, S.K.

Photographic stellar magnitudes of Ikeya's comet (1963a).
Astron.tsir. no.268:3-4 N '63.   (MIRA 17;4)

1. Kafedra astronomii Kiyevskogo gosudarstvennogo universiteta.

VSEKHSVYATSKIY, S. K. Prof

PA 63/49T2

USSR/Astronomy
Comets

May 49

"Origin of Comets," Prof S. K. Vsekhsvyatskiy, 6 pp

"Nauka i Zhizn'" No 5

During last 150 years, work of Russian and Soviet astronomers was of decisive importance in determining nature of comets. Discusses importance of determining comets' movement to deduce their origin. Most plausible theory is that comets are part of our solar system. Analyzes characteristics and paths of several comets. Stresses general ideological significance of studying the origin of comets

63/49T2

USSR/Astronomy   (Contd)   May 49

(on a broader scale, of planets and the earth) as a factor in developing a thorough dialectical-materialistic outlook.

63/49T2

VSEKHSVYATSKIY, S.K.

Solar wind and solar corpuscular streams. Geomag. i aer. 4
no.2:328-332 Mr-Ap '64.
(MIRA 17:4)

1. Kiyevskiy gosudarstvennyy universitet.

VSEKHSVYATSKIY, S. K.

21353   VSEKHSVYATSKIY, S. K. I ZELANEK, E. N. Sravnitel'noe issledovanie krivykh
solnechnoy aktivnosti po razlichnym indeksam. Doklady akad nauk SSSR,
Novaya seriya, T. LXVII, No. 2, 1949, S. 237-40.

SO: Letopis' Zhurnal'nykh Statey, No. 29, Moskva, 1949.

VSEKHSVYATSKIY, S.K.

Problem of the origin of comets. Publ.Kiev.astron.obser. no.3:3-16 '50.   (MLRA 7:9)
        (Comets)

VSEKHSVYATSKIY, S.K.

Features of latitudinal assymetry in the distribution of sunspot
activity. Publ.Kiev.astron.obser. no.3:25-33 '50.   (MLRA 7:9)
      (Sunspots)

VSEKHSVYATSKIY, S.K.

VSEKHSVYATSKIY, S.K.; SANDAKOVA, Ye.V.

Position of asteroids and comets based on observations of Kiev
Astronomical Observatory. Publ.Kiev.astron.obser. no.3:93-95 '50.
(Comets) (Planets, Minor)   (MLRA 7:9)

VSEKHSVYATSKIY, S.K.

Yearly variation in solar activity. Publ.Kiev.astron.obser. no.4:
33-40 '50.   (MIRA 7:9)
        (Sun)

VSEKHSVYATSKIY, S.K.

Short-period comet Wolf I and its origin. Publ.Kiev.astron.
obser. no.4:49-65 '50.   (MLRA 7:9)
    (Comet, Wolf's I)

VSEKHSVYATSKIY, S.K.

Observations of the lunar ecliple of October 7, 1949. Publ.Kiev. astron.obser. no.4:97-100 '50. (MLRA 7:9)
(Eclipses, Lunar--1949)

VSEKHSVYATSKIY, S.K.   PA156T10

USSR/Astronomy - Comets   Jan/Feb 50
                    Photometry

"The Short-Periodic Comet Wolf I and Its Gene-
sis," S. K. Vsekhsvyatskiy, Kiev Astr, 16 pp

"Astron Zhur" Vol XXVII, No 1

Discusses photometry of comets and Bobrovnikov's
methods, absolute magnitude of Wolf I between
1885 and 1945, brightness of Wolf 1 in various
phenomena, astronomical table of observations on
Wolf I, disruption of periodic comets and their
peculiarities of motion, and possible sources of
comets in the solar system. Submitted May 49.

                                        156T10

Astronomia i eyo Znachenye v Sotsialisticheskom Stroitelstve (Astronomy and Its Importance to Socialist Structure) 21, A Lithograph of the AU Society for the Dissemination of Political and Scientific Knowledge, Moscow 1950. Astronomical Journal, Vol. 27, No. 3, 1950.

VSEKHSVIATSKIY, S. K. and YAKOVKIN, A. A.

Astronomia (Astronomy), 2nd edition, 119 p., State Educational-Pedagogical Publ.
House "Radianska School," Kiev 1949. Astronomical Journal, Vol. 27, No. 3, 1950.

KONOPLEVA, V.P.; VSEKHSBYATSK, S.K., professor, direktor.

Observations of minor planets at the Kiev Astronomical Observatory. Astron.
tsir. no.105:2-3 S '50.   (MIRA 6:8)
                                                          (Planets, Minor)

VSEKHSVIATSKYY, S. K.

USSR/Astronomy - Computing Instruments   Jan 51

"Astronomy in the Service of Humanity," S. K.
Vsekhsviatskyy

"Nauka i Zhizn'" No 1, pp 19-21

Short historical review. Computational work of
Leningrad Inst of Theoretical Astr using machines
is described as completely independent of foreign
contributions. Solar observatories are established
in Pulkovo and Kiev.

222T35

VSHEKHSVYATSKIY, S. K.

USSR/Astronomy - Comets   Jan/Feb 52

"Periodic Comets and Their Origin," S. K. Vshekh-
svyatskiy, Astron Obs, Kiev State U

"Astron Zhur" Vol XXIX, No 1, pp 63-75

Discusses work by J. H. Oort (cf Bull Netherlands,
Vol XI, No 408, 1950) on perturbation of comet or-
bits by near stars and by planets. Considers
comets as originating from some explosions on plan-
ets or from complete disintegration of some planet.
Suggests that not only Jupiter, but also other
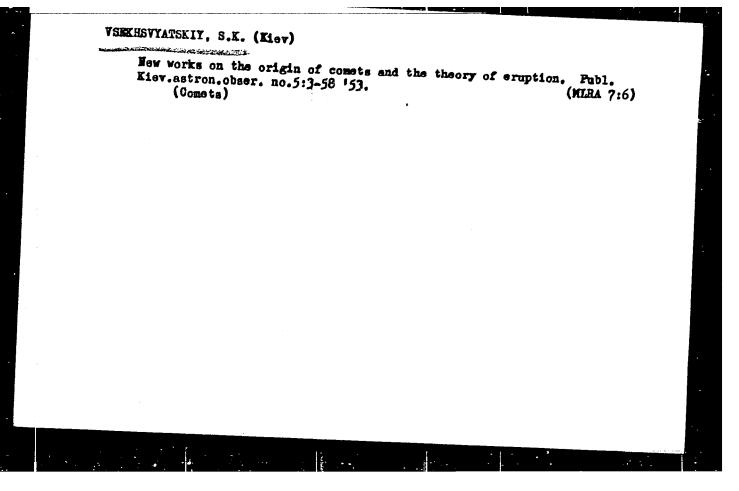planets are sources of comets. Received 30 Mar 52.

202T8

ASTAPOVICH, I.S.; BRONSHTEN, V.A.; BUGOSLAVSKAYA, Ye.Ya.;
BUGOSLAVSKAYA, N.Ya; VSEKHSVYATSKIY, S.K.; MIKHAYLOV, A.A.;
SIVKOV, S.I.; TER-OGANEZOV, V.T.; RAKHLIN, I.Ye., red.;
NEGRIMOVSKAYA, R.A., tekhn. red.

[Solar eclipse of February 25, 1952, and its observation] Sol-
nechnoe zatmenie 25 fevralia 1952 g. i ego nabliudenie. Sost.
I.S.Astapovich i dr. Pod red. A.A.Mikhailova. Moskva, Gos.
izd-vo tekhniko-teoret. lit-ry, 1951. 175 p.   (MIRA 15:4)

1. Vsesoyuznoye astronomo-geodezicheskoye obshchestvo. 2. Chlen-
korrespondent Akademii nauk SSSR (for Mikhaylov).
        (Eclipses, Solar—1952)

VSEKHSVYATSKIY, S. K.

Planets, Minor

Observations of minor planets at the Kiev Astronomical Observatory., Astron, tsir., no. 122, 1952.

9. Monthly List of Russian Accessions, Library of Congress,   May   1958, Unclassified.

VSEKHSVYATSKIY, S.K. (Kiev)

New works on the origin of comets and the theory of eruption. Publ.
Kiev.astron.obser. no.5:3-58 '53.
    (Comets)   (MLRA 7:6)

VSEKHSVUATSKIY, S. K., ZEMANEK, Ye., M., SERGEYEVA, A. N.

"System of Indices of Solar Activity," Publikatsii Kievsk. astronom. observ., No 5, 1953, pp 147-154

Kiev Astronomical Observatory compiled data of the number of days of observations carried out in years 1947-1949 by ten observatories: those of Tashkent, Kharkov, Kiev, Odessa, Abastuman, Kazan, Lvov, NIIZM [Scientific Research Institute of Terrestrial Magnetism], Irkutsk and Crimea. Discrepancies in evaluations from the average by all mentioned observatories are given. The average error is about 6.5%. The introduction of a unique method of observations and a unique system of indexes is considered essential. RZhAstr, No 4, 1955)

SO: Sum. No. 568, 6 Jul 55

VSEKHSVYATSKIY, S.K.

Variation in the luminosity of the Encke-Backlund Comet. Astron.tsir. no.
134:2-4 F '53.   (MLRA 6:6)
                                              (Comet, Encke's)

VSEKHSVIATSKIY, S.K., professor; SLOBODSKOY, B.I., redaktor; KAT-
RENKO, D.A., redaktor.

[How the universe became known] Kak poznavalas' vselennaia.
Moskva, Gos. izd-vo tekhniko-teoret. lit-ry, 1954. 62 p.
(Nauchno-populiarnaia bilioteka, no.68)   (MLRA 7:8)
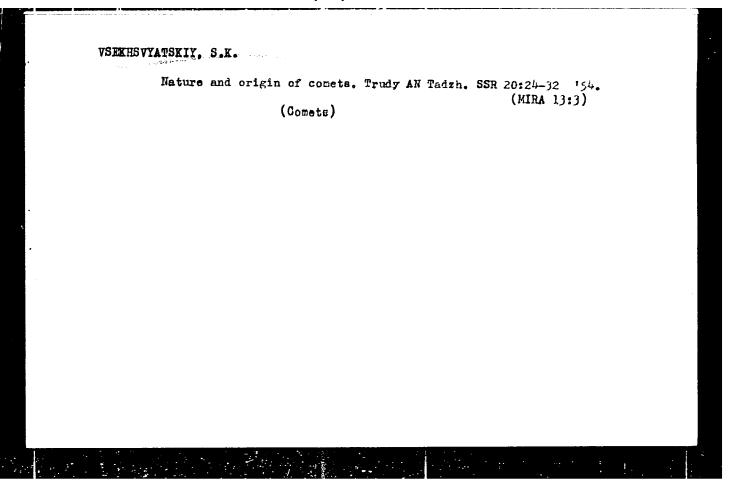   (Astronomy--History)

VSEKHSVYATSKIY, S.K.

BRONSHTEN, V.A.; BUGOSLAVSKAYA, Ye.Ya; BUGOSLAVSKAYA, N.Ya; VSEKHSVYATSKIY,
     S.K.; DAGAYEV, M.M.; LEPSKIY, M.M.; SIVKOV, S.I.; TER-OGANEZOV, V.T.
     MIKHAYLOV, A.A., redaktor; RAKHLIN, I.Ye., redaktor; TUMARKINA, N.A.,
     tekhnicheskiy redaktor

[Solar eclipses and observations on the solar eclipse of June 30,
1954] Solnechnye zatmeniia i ikh nabliudenie; k solnechnomu zatme-
niiu 30 iiunia 1954 g. Moskva, Gos. izd-vo tekhniko-teoret. lit-ry,
1954. 223 p.   (MLRA 7:10)

1. Chlen-korrespondent AN SSSR (for Mikhaylov)
       (Eclipses, Solar)

VSEKHSVYATSKIY, S.K.

"The solar corona. Part 1: Observations of the corona 1939-1949"
[in German]. M.Waldmeier. Reviewed by S.K.Vsekhsviatskii. Vop.
kosm. 2:313-316 '54.   (MIRA 8:5)
            (Sun—Corona) (Waldmeier, Max)

VSEKHSVYATSKIY, S.K.

Nature and origin of comets. Trudy AN Tadzh. SSR 20:24-32 '54.

(MIRA 13:3)

(Comets)

VSEKHSVYATSKIY, S. K.

AID P - 378

Subject	:	USSR/Astronomy
Card 1/2	Pub. 8 - 8/12	
Author	:	Vsekhsvyatskiy, S. K.
Title	:	On the Change of Brightness of the Comet Encke-Baklund
Periodical	:	Astron. zhur., v. 31, 3, 281-293, My-Je 1954
Abstract	:	A general review of photometric values made by Golechek for the appearances of the Encke-Baklund comet before 1918 is presented. Average curves of brightness of the comet are constructed for its appearances before the perihelion (1820, 1872 and 1908 epochs) and after the perihelion (1838, 1878, 1908 epochs). Parameters of the average curves are found, which show not only the systematic decrease in the comet's brightness, but also the possible increase in course of time of the mean exponent of the power in the formula of the change in brightness: $I = I_0 / r^K \Delta^2$. The existence of a considerable deviation of the brightness curve of the comet from the gradual law is confirmed. The question of the

possible effect of the phase angle showed after study that this effect could not be ascertained for Encke-Baklund's comet. Observation data for its latest appearances are collected and the mean brightness curve for the epoch 1935 constructed. The absolute secular change in size of the comet is brought out. Parameters of the formula $H_\Delta = H_0 + z(r^n - 1)$ are computed. The formula coincides with B. Levin's formula based on the act of desorption of the solid rock masses in the comet nucleus into gas. A table is given of the absolute sizes of the comet in its numerous appearances. 9 tables and two graphs illustrate the text. 6 Russian references (after 1943) of a total of 17 Russian and non-Russian.

Institution : Department of Astronomy of Kiev State University

Submitted   : January 24, 1953

VSEKHSVYATSKIY, S.K.

Comments on J.Oort's works devoted to problems of the origin and
evolution of comets. Astron.zhur. 31 no.6:537-543 N-D '54.
(MIRA 8:1)

1. Kiyevskiy gosudarstvennyy universitet.
(Comets) (Oort, Jan Hendrik)

VSEKHSVYATSKIY, S.K.; NIKOL'SKIY, G.M.

Observations of the lunar eclipse of January 18/19, 1954. Astron.tsir.
no.146:5-7 F '54.   (MLRA 7:6)

1. Kafedra astronomii KGU. 2. Odesskaya Astronomicheskaya observatoriya.
    (Eclipses, Lunar--1954)

VSEKHSVYATSKIY, S. K.

Observations of the solar eclipse of June 30, 1954, at Kozelets
by the expedition of the Astronomy Department of Kiev University,
Astron.tsir. no.151:3-5 Jl '54.   (MLRA 8:3)

1. Kafedra astronomii Kievskogo gosuniversiteta.
   (Eclipses, Solar—1954)

VSEKHSVYATSKIY, Sergey Konstantinovich, professor; MIKENTSEV, V.A., redakter; TUMARKINA, N.A., tekhnicheskiy redakter.

[How we learned about the universe] Kak poznavalas' vselennaia. Izd. 2-oe, perer. Moskva, Gos.izd-ve tekhnike-teoret. lit-ry, 1955. 46 p. (Nauchno-presvetitel'naia biblieteka, ne.8)   (MIRA 9:5)

(Astrenemy--Histery)

AUTHORS: Baum. F. A., Vsekhsvyats'kiy, S. K., Stanyukovich, K. P.

TITLE: On the Explosive Processes of Powerful Volcanic Eruptions (O vzryvnykh protsessakh pri moshchnykh vulkanicheskikh izverzheni- yakh) in Ukrainian

PERIODICAL: Nauk. zap. Kiyvs'k. un-t, 1955, Vol 13, Nr 7, pp 123-130

ABSTRACT: The paper analyzes the question of the sources of energy of the gigantic explosive processes observed on numerous occasions during extremely powerful volcanic eruptions (Vesuvius, Fujiyama, "Sangay","Papandayang", Osamayama, Tamboro, "Gunung- Gelungung", "Kazegvina", Krakatau). It is shown that under condi- tions which exist at extreme depths of the earth there are accumu- lated tremendous quantities of H_2, CO, CH_4, etc. At elevated pres- sures and temperatures these are explosive mixtures high in energy and readily detonated. Various reactions are analyzed and an evalu- ation of the energy released is made. The total amount of the energy of the explosion is calculated which is required to eject solid rocks of several scores of cubic kilometers in size (Krakatau, August 27,
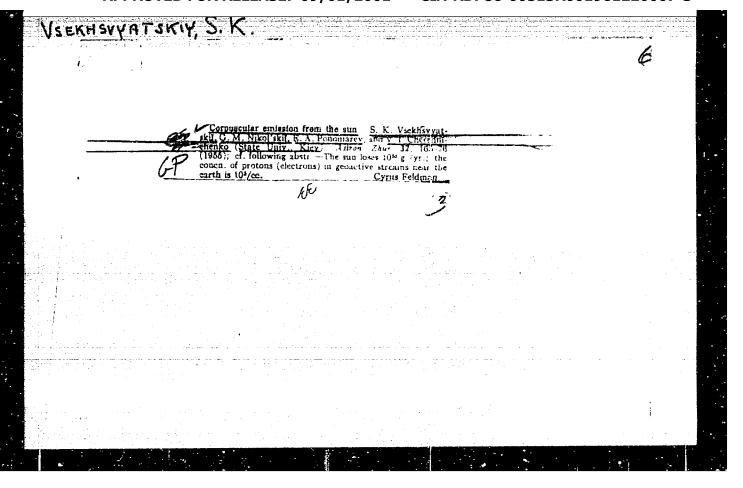
Card 1/2

On the Explosive Processes of Powerful Volcanic Eruptions   SOV/124-57-5-5264

1883). It is also shown that the velocities attained by some individual rocks may exceed 8 km/sec.

From the résumé

Card 2/2

VSEKHSVYATSKIY, S. K.

Corpuscular emission from the sun   S. K. Vsekhsvyat-skiy, G. M. Nikol'skii, S. A. Ponomarev, and V. I. Cherednichenko (State Univ., Kiev)   *Astron. Zhur.* 32, 165-78 (1955); cf. following abstr.—The sun loses 10^{14} g/yr.; the concn. of protons (electrons) in geoactive streams near the earth is 10^3/cc.   Cyrus Feldman

VSEKHSVYATSKIY,S.K.; NIKOL'SKIY,G.M.

Structure of the solar corona of June 30, 1954. Astron.zhur.32
no.4:354-358 Jl-Ag'55.   (MLRA 6:10)

1. Kiyevskiy Gosudarstvennyy universitet, Kafedra astronomii
(Sun--Corona)

VSEKHSVYATSKIY, S.K.

Problems in the origin of comets, meteorites and meteoritic matter and problems of the solar system. Astron.zhur.32 no.5:432-438 S-O '55.

(MLRA 9:1)

1.Kiyevskiy gosudarstvennyy universitet, Kafedra astronomii.
(Comets) (Meteors)

VSEKHSVYATSKIY,S.K.

Comet Mrkos 1955e. Astron.tsir. no.160:1 Je '55. (MLRA 8:12)
(COMETS--1955)

VSEKHSVYATSKIY, S.K.;   NAZARCHUK, G.K.;   VODOP'YANOVA, T.V.

Mrkos' comet (1955b). Astron.tsir. no.162:8-9 Ag '55. (MLRA 9:5)

1. Kafedra astronomii Kiyevskogo gosudarstvennogo universiteta, Kiyev.

(Comets--1955)

VSEKHSVYATSKIY, S.K.

         Brilliance of Mrkos' comet (1955b). Astron.tsir. no.162:9 Ag '55.
                                                   (MLRA 9:5)

1. Kafedra stronomii Kiyevskogo gosudarstvennog universiteta,
Kiyev.
                  (Comets--1955)

VSEKHSVYATSKIY, S.K.

Variation in the brightness of Encke-Backlund's comet.
Publ. Kiev. astron. obser. no.7:31-44 '56.   (MIRA 9:12)

(Comet, Encke's)

VSEKHSVYATSKIY, S.K.

Catalog of absolute magnitudes of comets. Astron. zhur. 33 no.4:516-
548 Jl - Ag '56.   (MLRA 9:11)

1. Kafedra astronomii Kiyevskogo gosudarstvennogo universiteta.
      (Comets—Catalogs)

VSEKHSVYATSKIY, S.K.; NIKOL'SKIY, G.M.

Observations in Kiev of the partial solar eclipse of December 14, 1955. Astron.tsir. no.166:2-3 'Ja '56.   (MIRA 9:7)

1.Kafedra astronomii Kiyevskogo gosudarstvennogo universiteta imeni T.G.Shevchenko.
                (Eclipses, Solar—1955)

VSEKHSVYATSKIY, S. K.

Observations of appearance and brilliance of Honda's comet
(1955 g). Astron.tsirk. no.171:2-5 Jl '56.   (MLRA 9:12)

1. Kafedra astronomii Kiyevskogo gosudarstvennogo universiteta.
          (Comets--1955)

VSEKHSVYATSKIY, S. K.

Evaluating the brilliance of Mrkos' comet (1955 b).
Astron.tsirk. no.171:5 Jl'56.   (MLRA 9:12)

1. Kafedra astronomii Kiyevskogo gosudarstvennogo universiteta.
                        (Comets--1955)

VSEKHSVYATSKIY, S. K.

Observations of Bakharev-MacFarlane-Krienke's comet (1955 f).
Astron.tsirk. no.171:6-7 Jl '56.   (MLRA 9:12)

1. Kafedra astronomii Kiyevskogo gosudarstvennogo universiteta.
(Comets--1955)

VSEKHSVYATSKIY, S.K.

Results of statistical studies of comets. Biul.Kom.po komet.
i meteor.AN SSSR no.1:5-23 '57.   (MIRA 12:5)

1. Kafedra astronomii Kiyevskogo gosudarstvennogo universiteta
im. T.G.Shevchenko.
                    (Comets)